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Patent and Trademark Office

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EXAMINER	
ART UNIT	PAPER NUMBER
3	

DATE MAILED: 11/22/88

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS

This application has been examined       Responsive to communication filed on \_\_\_\_\_       This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), \_\_\_\_\_ days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1.  Notice of References Cited by Examiner, PTO-892.      2.  Notice re Patent Drawing, PTO-948.  
3.  Notice of Art Cited by Applicant, PTO-1449      4.  Notice of informal Patent Application, Form PTO-152  
5.  Information on How to Effect Drawing Changes, PTO-1474      6.  \_\_\_\_\_

Part II SUMMARY OF ACTION

1.  Claims 1 - 23 are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

2.  Claims \_\_\_\_\_ have been cancelled.

3.  Claims \_\_\_\_\_ are allowed.

4.  Claims 1 - 23 are rejected.

5.  Claims \_\_\_\_\_ are objected to.

6.  Claims \_\_\_\_\_ are subject to restriction or election requirement.

7.  This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.

8.  Allowable subject matter having been indicated, formal drawings are required in response to this Office action.

9.  The corrected or substitute drawings have been received on \_\_\_\_\_. These drawings are  acceptable;  not acceptable (see explanation).

10.  The  proposed drawing correction and/or the  proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been  approved by the examiner.  disapproved by the examiner (see explanation).

11.  The proposed drawing correction, filed \_\_\_\_\_, has been  approved.  disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections MUST be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.

12.  Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has  been received  not been received  been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.

13.  Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14.  Other

Claims 1-6 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language of the claims is focused on recitations of physical properties to define the latex. Whereas these recitations are functional they fail to define what the copolymer may consist of or comprise.

The terms "increased temperature and humidity" are qualitative and do not define any particular values of temperature or humidity. What would a non-increased value represent?

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless-

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the

subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-6, 10 and 14-23 are rejected under 35 U.S.C. 103 as being unpatentable over Hen.

The patent to Hen teaches the production of a latex composition which may be employed as a binder for cellulosic paper compositions. Note column 2 (lines 9-46) which teaches the relative proportions of monomers which may be employed and which correspond to those employed by applicants.

Since the relative proportions of monomers used by the reference overlap with those of the claims as in claim 17, and since the product apparently has "sufficient strength for necessary handling", the latex composition of the claims is deemed to be an obvious modification of the reference. The further manipulation of the Tg values or modulus of rupture as reflected by percentages of monomer proportions likewise are deemed to be of a mechanical nature. Employment of the latex composition in any composite, sheet or nonwoven, in its art recognized capacity, that is, as a binder, is deemed to be an obvious modification to a practitioner in the art, absent any showing of unexpected results. Finally, selection of suitable monomers including styrene, butadrene, and  $\alpha,\beta$ -ethylenically unsaturated monomers and their esters is manipulable to a practitioner in view of the monomers recited at column 2 (lines 9-46).

Claims 7-9 and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Hen, cited above.

The patent to Hen teaches the production of a latex which may comprise a monovinylidene monomer, including styrene and its derivatives, and aliphatics conjugated diene, including butadiene and  $\alpha,\beta$ -ethylenically unsaturated monomer including ethyl acrylate.

The monomers recited at column 2 (lines 9-46) and column 2 (line 62) to column 3 (line 65) embrace those recited in the instant claims. Thus, the reference is deemed to anticipate in the sense of 35 USC 102(b) the instant claims.

NNutter:clw

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1/25/88

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